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DETAILED ACTION

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior at are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Northrup et al (6979424) in combination with Aritomi et al (20030073110).

Northrup et al disclose an analysis device having a body having a reaction chamber for chemically reacting a sample, a separation region for separating components of the sample and a transition region connecting the reaction chamber to the separation region. The reaction chamber is an amplification chamber for amplifying nucleic acid in the sample and the separation region comprises an electrophoresis channel having a matrix material such as electrophoresis gel or buffer, for separating nucleic acid fragments. Electrodes are embedded in the body for separation of sample components. See abstract. The transition region includes at least one flow restrictor for controlling the flow of fluid between the reaction chamber and the separation region.

See col. 2, line 66 – col. 3, line 1. The separation region has an electrophoresis column or capillary having a matrix material of a gel or buffer for separating nucleic acid fragments in the sample. See col. 3, lines 9-13. The processing device 2 is formed of a body 4. The body 4 has formed therein a reaction chamber 6, a separation region 8 and a transition region 10 connecting the reaction chamber to the separation region. The

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reaction chamber 6 has an inlet port 12 for adding sample and reagents as required by the reaction performed in the chamber. The device 2 may include an outlet port and an inlet port. The ports serve to connect the device to an external pump, vacuum source or syringe. The ports also may function as vents. The separation region 8 is a capillary electrophoresis tube 14, containing separation material of a gel or polymers for separating components of the sample. The type of separation material to be used is known in the art. The device 2 also includes an injection electrode 20 and a separation electrode 22. The electrodes are located at opposite ends of the device to drive electrophoretic, electro-osmotic or IEF ion flow through the separation region 8. See col. 4, lines 22-45. The device is disclosed to be produced by injection molding, casting, machining or other convenient means of making a one piece body without bonding multiple pieces together. However, the patent further sets forth that even though this is the preferred method, that it can also be produced by sealing or laminating one or more plastic films to a molded polymeric part. See col. 1, lines 46-67.

The prior art of Northrup et al does not teach specifically the container having blocks but does disclose the same components.

Aritomi et al disclose an electrophoresis device for isolating nucleic acid wherein the device is assembled through the use of through holes and screw holes wherein a rod shaped element is inserted therein with sealing materials between the segments of the device for sealing the structure together so that the sealing plates change shape slightly when adjusting the crimping force of the screw and nut mechanism so that the

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sealing plates and base plates are hermetically sealed to yield a flow path that is sealed to outside sources within the device.

The subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the instant invention was made because even though the prior art of Northrup did not teach blocks it does disclose components being connected together in one piece construction and further sets forth that one of ordinary skill in the art would have the knowledge to make this device with individual components which could be sealed together to form such device. Further, Aritomi et al discloses that components of an electrophoresis device can be individually connected and sealed together using screws, rods and bolts. Therefore, one of ordinary skill in the art would be motivated to use the teachings of Aritomi et al in the device of Northrup et al to achieve the instant invention as set forth in the instant claims. Therefore, the prior art of Northrup et al in combination with Aritomi et al renders the applicants instant invention as obvious for the

Double Patenting

3. Claim 7 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 2 of copending Application No. 12/182004. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claim of the copending application encompasses that of the instant claim. Although not all the specifics are set forth in the copending claim, the examiner was motivated to go to the copending specification to see how the device was assembled and in doing so found the same features in the copending

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application as are found in the instant invention. Since applicant had the opportunity to claim that pertinent in either application, it appears that the provisional obviousness type double patenting is proper.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce F. Bell whose telephone number is 571-272-1296. The examiner can normally be reached on Monday-Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BFB /Bruce F. Bell/

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January 8, 2010 Primary Examiner, Art Unit 1795